

a case formed from a magnetic material that covers the coils wherein the case is welded to the inner cores but not welded to the outer cores, to form two independent magnetic circuits formed by the inner cores, the case, and the outer cores;

wherein the motor is a stepping motor.

13. (New) A motor according to claim 12, wherein each of the inner cores and each of the outer cores has teeth-like poles;

the teeth-like poles on the inner cores and the teeth-like poles on the outer cores are alternately disposed to face a rotor magnet of a rotor that is disposed inside the plurality of core pairs; and

the case is commonly in contact with outer circumference sections of the inner cores and outer cores that form the plurality of core pairs.

14. (New) A motor according to claim 13, wherein the case is formed from a curled thin plate.

15. (New) A motor according to claim 14, further comprising connection terminals configured to supply current to the coils connected to the inner cores and the outer cores, wherein the case has an arc-shape that defines an opening for the connection terminals.

16. (New) A motor according to claim 15, wherein the arc-shaped case has end sections, and the case and the inner cores are welded at welding spots at the end sections of the arc-shaped case and at a midpoint in the circumferential direction between the end sections of the arc-shaped case.